

Remarks

In the January 09, 2008 office action, the Examiner rejected Claims 1-28 as unpatentable
5 over Susnow et al. (US Publication No. 2002/0159385) (hereinafter "Susnow") in view of Ebata
(US Publication No. 2003/0174652) (hereinafter "Ebata") under 35 USC 103(a). Applicant has
amended Claims 1, 5, 6, 11, 18, 25 and 27 to further clarify the invention. Support for the
amendments can be found throughout the specification. No new matter is added. Claims 1-28
are now pending; of which Claims 1, 5, 11, 18, 25 and 27 are independent claims. Applicant re-
10 spectfully requests allowance of the pending claims based on the amendments and the remarks
below.

Rejection Under 35 USC § 103

The Examiner rejected Claims 1-28 as unpatentable over Susnow and in view of Ebata
under 35 USC 103(a) . Applicant overcomes the rejection based on at least the reasons given be-
15 low.

Claim 1:

Susnow in view of Ebata fails to disclose a "method for processing fibre channel
frames, comprising: providing a plurality of virtual lanes, each of the virtual lanes configured to
transmit one or more frames between a source and a destination; receiving a frame at a receive
20 port of a fibre channel switch element; assigning a virtual lane for a frame based on a the hop
count for the frame; determining if the assigned virtual lane has available credit; and transmitting
the frame using the assigned virtual lane, if credit is available." (Amended Claim 1, with addi-
tions underlined).

The Examiner relies on Susnow to disclose a method of a switch element for processing fibre channel frames (Para. 24) comprising assigning a first virtual lane to a frame (Para. 38), determining if the assigned virtual lane has a credit (Para. 49) and transmitting a frame if a credit is available (Para. 38, last five lines).

5 The Examiner admits and Applicant agrees that Susnow does not disclose assigning virtual lanes based on a hop count. The Examiner relies on Ebata to disclose “queuing” based on a hop count (Para. 9). Further, the Examiner indicates that it would have been obvious to one skilled in the art at the time the invention was made to have a virtual lane (i.e., queue) based on a hop count in order to provide a fair transmission of packets based on their traveled distance (See
10 Office Action Page 2, Sections 1 and 2). Applicant respectfully disagrees.

Applicant submits that Ebata discloses **a wireless system** for a “multi-hop network where packets received for transmission over a route are placed into one of a plurality of queues that corresponds to the hop count of the route and **scheduled according to the hop count numbers of the queues.**” (Para. 9). In Ebata, a Packet analyzer places a transmit packet into one of a plurality of queue buffers that corresponds to a hop count number detected in a route table for a received packet. The packets stored in the queue buffers are forwarded to a wireless interface **in a descending order of hop count number**, i.e., in a weighted round robin fashion. Therefore, **higher hop-count packets are transmitted earlier than lower hop-count packets.** (See Para. 31) (Emphasis added by Applicant).

20 Based on the foregoing, Applicant respectfully submits that Ebata simply discloses **a single queue** in a **wireless system** and schedules packet transmission based on the hop count of the packet, where a packet with a higher hop count is sent before a packet with a lower hop count. Ebata is non-analogous art because it is not related to processing fibre channel frames and fur-

ther, it is not related to the problem that Applicant intends to solve, i.e., reduce deadlock in a fibre channel fabric.

Assuming arguendo, Ebata is available as analogous art; it is still different from amended Claim 1. For example, in amended Claim 1, a virtual lane is assigned to a frame based on a frame's hop count. Frames are then transmitted via the assigned virtual lane if credit is available. Ebata does not disclose the concept of a plurality of dedicated virtual lanes, where each virtual lane is assigned to a frame based on a frame's hop count. Ebata simply discloses a queue where frames are placed in a hop count order and frames with higher hop count are transmitted first.

Therefore, Ebata fails to cure the deficiencies of Susnow. Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose amended Claim 1. Applicant respectfully requests allowance of Claim 1.

Claim 5

Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose Claim 5, at least based on the same reason provided above with respect to Claim 1. For brevity, Applicant has not reproduced the arguments previously made with respect to Claim 1. Applicant respectfully request allowance of Claim 5.

Claim 11

Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose Claim 11, at least based on the same reason provided above with respect to Claim 1. For brevity, Applicant has not reproduced the arguments previously made with respect to Claim 1. Applicant respectfully request allowance of Claim 11.

Claim 18

Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose Claim 18, at least based on the same reason provided above with respect to Claim 1. For

brevity, Applicant has not reproduced the arguments previously made with respect to Claim 1. Applicant respectfully request allowance of Claim 18.

Claim 25

5 Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose Claim 25, at least based on the same reason provided above with respect to Claim 1. For brevity, Applicant has not reproduced the arguments previously made with respect to Claim 1. Applicant respectfully request allowance of Claim 25.

10 Claim 27

Applicant respectfully submits that Susnow alone or in combination with Ebata fails to disclose Claim 27, at least based on the same reason provided above with respect to Claim 1. For brevity, Applicant has not reproduced the arguments previously made with respect to Claim 1. Applicant respectfully request allowance of Claim 27.

15 Claims 2-4

Claims 2-4 depend directly or indirectly from Claim 1. Therefore, Claims 2-4 are patentable for at least the same reasons given above with respect to Claim 1. Applicant respectfully requests allowance of Claims 2-4.

Claims 7-9

Claims 7-9 depend directly or indirectly from Claim 6. Therefore, Claims 7-9 are patentable for at least the same reasons given above with respect to Claim 6. Applicant respectfully requests allowance of Claims 7-9.

Claim 10:

Claim 10 depends from Claim 6. Therefore, Claim 10 is patentable for at least the same reasons given above with respect to Claim 6. Applicant respectfully requests allowance of Claim 10.

Claims 12-17

5 Claims 12-17 depend directly or indirectly from Claim 11. Therefore, Claims 12-17 are patentable for at least the same reasons given above with respect to Claim 11. Applicant respectfully requests allowance of Claims 12-17.

Claims 19-24

10 Claims 19-24 depend directly or indirectly from Claim 18. Therefore, Claims 19-24 are patentable for at least the same reasons given above with respect to Claim 18. Applicant respectfully requests allowance of Claims 19-24.

Claim 26

15 Claim 26 depends from Claim 25. Therefore, Claim 26 is patentable for at least the same reasons given above with respect to Claim 25. Applicant respectfully requests allowance of Claim 26.

20 Claim 28

 Claim 28 depends from Claim 27. Therefore, Claim 28 is patentable for at least the same reasons given above with respect to Claim 27. Applicant respectfully requests allowance of Claim 28.

Conclusion

For the foregoing reasons, Applicant believes that Claims 1-28 are allowable, and a notice of allowance is respectfully requested. If the Examiner has any questions regarding the application, the Examiner is invited to call the undersigned Attorney at (949)-955-1920

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Respectfully submitted,



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